REMARKS

In the official action mailed on October 2, 2002, claims 1-14 were rejected by the Examiner under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 5,905,271 to Wynn ("Wynn"). Applicants respectfully traverse this rejection and respectfully submit that the amended claims remaining in the application are not obvious by the disclosure provided in Wynn. In particular, it should be recognized that Wynn discloses a flow cell having a stepped window that is accommodated within the flow cell in which the optical pathlength through the product stream can be precisely adjusted. In contrast, Applicants disclose and claim a stepped element that has a length that is selected to increase or decrease the fluidic measurement pathlength.

The optical pathlength of Wynn can be adjusted by rotating bodies within rings, with O-rings being compressed as the windows are moved in an inward direction. Those O-rings also cooperate with O-rings to hold the windows firmly in place between flanges and the bottom walls of recessed areas as the windows are advanced and retracted. The amount of window travel is limited by the compression of the O-ring and is typically on the order of 0.3mm per window, or 0.06 mm for the two windows. Specifically, Wynn suggests windows that are moved back and forth to adjust the optical path between windows. This adjustment to optical pathlength is emphasize within Wynn as follows:

> "Rotation of the adjuster bodies provides a vernier adjustment which permits the spacing between the windows, and hence the length of the optical path between the windows, to be set with a high degree of precision" (Column 3 lines 6-9, emphasis added)

The instant invention is concerned with the variation of fluidic measurement pathlength. The fluidic pathlength of Wynn is a set length and it is the optical pathlength that is adjusted.

In the structure of the instant invention the element holder of the flow cell is configured so that pressure is exerted upon the stepped element. The fluidic measurement pathlength is varied by an increased or decreased stem length of the stepped element. This configuration is unlike that disclosed in Wynn where the fluidic pathlength is not varied, but rather the optical pathlength is varied by the application of pressure upon a window element where a non-resilient O-ring allows the window element to move back and forth to change the optical pathlength.

It is respectfully submitted that Wynn does not suggest or teach a flow cell having "a stepped element having a stem and a base, said stem having an end surface protruding into said fluidic channel creating a fluidic measurement pathlength and said base having a substantially planar sealing surface, a length of said stem being selected to increase or decrease said fluidic measurement pathlength". By the amendments herein, the Applicants respectfully submit that the rejection is overcome.

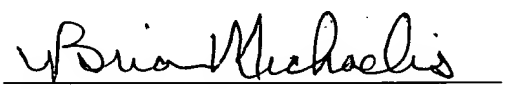
CONCLUSION

Accordingly, it is believed that in view of the above amendments and remarks, all claims are in condition for allowance, and therefore reconsideration and allowance are earnestly solicited. If the Examiner feels that a telephone conference would expedite prosecution of this case, or resolve any remaining issues, the Examiner is invited to contact the undersigned at (617) 856-8369.

In accordance with 37 CFR 1.121(c)(1)(ii) a marked up version of the amended claim is attached as Appendix A.

Respectfully submitted,

Dated: December 2, 2002

By: 

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Appendix A

1. (TWICE AMENDED) A photometric measurement flow cell comprising:

a cell body having a first end and a second end;

a fluidic channel allowing the passage of fluids, contain within said cell body;

an element holder contained within said first end of said cell body wherein said element holder has a substantially planar sealing surface for receiving an element;

a stepped element having a stem and a base, said stem having an end surface protruding into said fluidic channel creating a fluidic measurement pathlength and said base having a substantially planar sealing surface, a length of said stem being selected to increase or decrease said fluidic measurement pathlength;

said stepped element contained within said element holder and sealed within said cell body by a sealing gasket positioned between said substantially planar sealing surface of said stepped element and said substantially planar sealing surface of said cell body whereupon pressure exerted against said substantially planar sealing surface of said stepped element and said substantially planar sealing surface of said cell body cause said stepped element to be reliably sealed within said cell body [with said stem protruding into said fluidic channel creating a fluidic measurement pathlength].